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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/811,211   | 03/26/2004  | Paul Thomas Huckabee | TH 2037             | 1956             |
| 23632  | 7590        | 04/19/2006           | EXAMINER            |                  |
| SHELL OIL COMPANY<br>P O BOX 2463<br>HOUSTON, TX 772522463 |             |                      | DANG, HOANG C       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3672                |                  |

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |                 |  |
|------------------------------|-----------------|-----------------|--|
| <b>Office Action Summary</b> | Application No. | Applicant(s)    |  |
|                              | 10/811,211      | HUCKABEE ET AL. |  |
|                              | Examiner        | Art Unit        |  |
|                              | Hoang Dang      | 3672            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/23/04 &amp; 8/22/05</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 24 and 27 are objected to because of the following informalities: The expression “the screen sections” in claim 24, line 3 has no proper antecedent basis (it appears claim 24 is meant to depend on claim 22). The word “varing” in claim 27, line 3 should be –varying--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 7, 9, 10, 14, 15, 17, 19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Brockman (US 6,505,682) (see figures 10-16; column 4, line 5 through column 5, line 50).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 2-5, 11-13 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman (US 6,505,682) in view of Danos et al (US 6,752,207).

Brockman discloses the invention as claimed except that Brockman does not disclose the use of optical fiber, hydraulic cable or pneumatic cable. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use either electrical cable, optical fiber, hydraulic cable or pneumatic cable in Brockman because it is well known in the art to use an electrical cable, optical fiber, hydraulic cable or pneumatic cable to transmit downhole signals as evidenced by Danos et al (see column 4, lines 6-8).

6. Claims 7, 15, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman '682 in view of Echols et al (US 6,782,948).

Brockman discloses the invention as claimed except for the use of wireless communication. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use wireless communication in Brockman as claimed because it is well known in the art to use either hard wire arrangement or wireless communication to operate a valve as evidenced by Echols et al (column 6, lines 44-47).

7. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman '682 in view of Coon (US 5,896,928) or Tubel et al (US 6,176,312).

Brockman discloses the invention as claimed except that Brockman does not disclose the use of a data recorder. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Brockman with a data recorder because it is well known in the art to use a downhole recorder to record downhole information for later use as evidenced by Coon (column 5, lines 16-24) or Tubel et al (column 15, lines 26-34).

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8. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman '682 in view of Voll et al (US 6,112,817).

Brockman discloses the invention as claimed except for the use of differential pressure sensor or temperature sensor. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Brockman with differential pressure sensor or temperature sensor as claimed because it is well known in the art to use differential pressure and temperature sensors as claimed in order to optimize the production of the formation fluids as evidenced by Voll et al (column 6, lines 33-41).

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman '682 in view of Vinegar et al (US 6,679,332).

Brockman '682 discloses the invention as claimed except for the use of a time varying signal to communicate with the valve from the sensor. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a time varying signal as claimed because such a time varying signal is well known and used in the art for downhole communication purposes as evidenced by Vinegar et al (see column 15, lines 3-9).

***Allowable Subject Matter***

10. Claims 22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

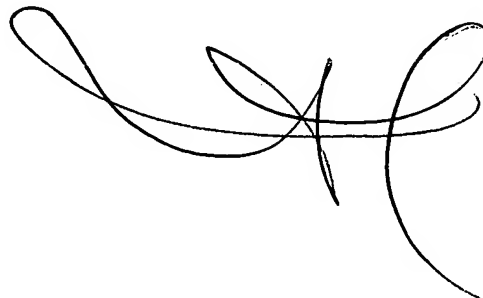
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Dang whose telephone number is 571-272-7028. The examiner can normally be reached on 9:15-5:45 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoang Dang  
Primary Examiner  
Art Unit 3672

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke, positioned below the printed name and title of the examiner.